

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018193**Date Inspected:** 17-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG TRIAL ASSEMBLY YARD

NDT:

Segment 11CW ~ 11DW

This QA Inspector performed Ultrasonic Testing (UT) Verification inspection of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations verified are as follows.

SP783-001-044, 043

SP743-001-050,

SP683-001-032,

EP139-001-013,

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DP684-001-019- UT Reject

Nondestructive testing (NDT) notification No. 07387

Segment 11CW ~ 11DW

During the Quality Assurance Inspector Ultrasonic Testing (UT) Verification inspection of welds located on Orthotropic Box Girder (OBG) Segment 11CW~11DW, this Quality Assurance Inspector (QA) discovered the following issue: one (1) longitudinal Linear Indication measuring approximately 15mm in length. The weld is identified as DP694-001-019. The weld is Complete Joint Penetration (CJP) groove joint. The weld joint is located Corner Assembly I-rib to I-rib. The weld is designated as a Non Seismic Performance Critical Material (Non-SPCM). These indications are clearly marked on near the weld. Segment 11CW~11DW is located on the Trial Assembly Yard. The Notice of Witness Inspection (NWIT) No. is 07387. This indication is located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. See attached Photo for further details.

This QA inspector generate an incident report on this date as per the direction of Lead Inspector Mr. Albert Carreon

WELDING:

Segment 11AE

This QA Inspector observed ZPMC qualified welding personnel identified as 047353 perform Flux Core Arc Welding (FCAW), weld joint identified as LB4A-002-044; located On Orthotropic Box Girder (OBG) Deck Plate to Light Bracket PJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2232-ESAB.

Segment 11AE

This QA Inspector observed ZPMC qualified welding personnel identified as 040367 perform Flux Core Arc Welding (FCAW), weld joint identified as LB4A-002-058; located On Orthotropic Box Girder (OBG) Deck Plate to Light Bracket PJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2232-ESAB.

Segment 11DW

This QA Inspector observed ZPMC qualified welding personnel identified as 069896 perform Shielded Metal Arc Welding (SMAW), weld joint identified as LB4-002-075; located On Orthotropic Box Girder (OBG) Deck Plate to Light Bracket PJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2314-TC-P4.

HEAT STRAIGHTENING:

This QA Inspector observed the following work in progress:

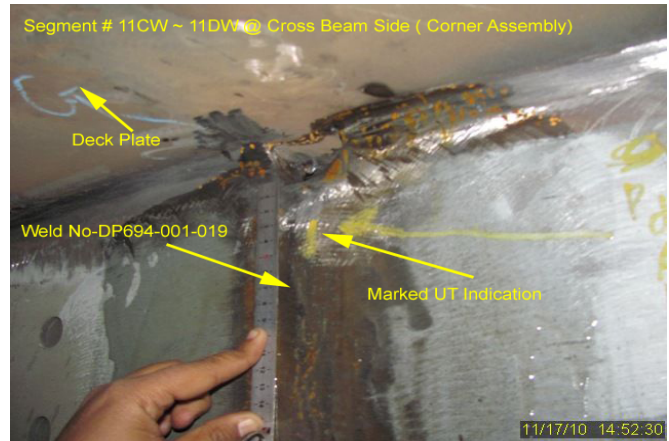
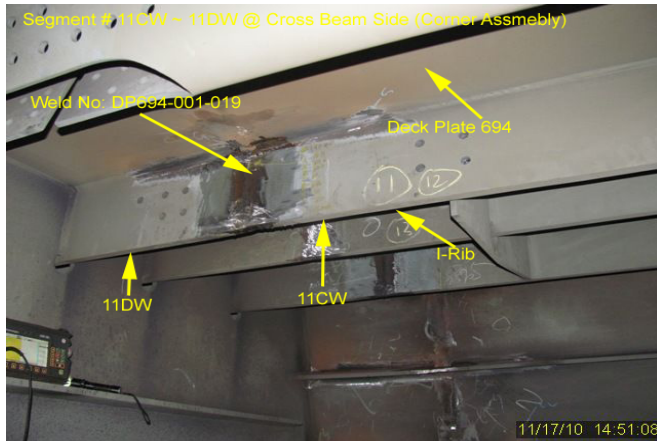
ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as Segment 11BW Panel Point 99 Floor Beam (West Side) Counter Weight Side. Distortion appeared to be caused by Welding. ZPMC

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Quality Control (QC) inspector identified as Mr. Zhou Peng was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report HSR1 (B) 9801.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
